## Comments on 'Information Privacy and Innovation in the Internet Economy'

# Avi Goldfarb and Catherine Tucker\* January 24, 2011

These comments are prepared with the aim of clarifying the contribution, insights, and context of the academic research we have done in the area of digital privacy. We have submitted a similar document in response to the FTC Staff Report on 'Protecting Consumer Privacy in an Era of Rapid Change: A Proposed Framework for Businesses and Policymakers'. In terms of the specific questions asked in the 'Information Privacy and Innovation in the Internet Economy' document, our research provides insight into (1) 'What is the best way of promoting transparency so as to promote informed choices?', and (2) 'Are there lessons from sector-specific [other] privacy laws—their development, their contents, or their enforcement—that could inform U.S. commercial data privacy policy?'

### 1 Effect of regulation on the advertising industry

Goldfarb and Tucker (2011c) uses nearly 10,000 randomized field or 'a/b' tests of online advertising and subsequent survey responses by three million consumers to investigate how advertising effectiveness changed in Europe following the enactment of the 2002 E-Privacy Directive. We wanted to clarify three additional insights that we feel this paper provides.

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- 1. The proposed regulation is very different in terms of technical details from the E-privacy directive that we study. However, our research does emphasize that privacy regulation can have large negative consequences for how well advertising performs especially when it includes language that affects advertisers' ability to target.
- 2. In the study we find that advertising effectiveness dropped in Europe by 65 percent after regulation relative to the rest of the world. However, the negative effects of regulation were not uniform. Instead our results were driven by two types of ads:
  - Ads that were placed on general websites whose content did not relate obviously to any commercial product, for example, CNN.com and Dictionary.com
  - Ads that were small and did not rely on striking ad design to gain attention

    On the other hand, these types of ads were not adversely affected by regulation:
    - Ads that were placed on websites that had content that was easily linked to demand for a group of products, such as tripadvisor.com or babycenter.com
    - Ads that were large or that had rich-media features that were designed to gain attention

This makes it likely that the effect of any regulation is not likely to be uniform. Instead, it will be borne most by websites that have content that is not easily monetizable and by advertisers that have so far shunned 'highly visual' advertising. In the long run, it seems likely that regulation could lead to incentives for websites to switch to content that is more easily matched to product (as they cannot use behavioral targeting techniques to match a consumer to a product) and for advertisers to use more highly visual and potentially distracting ads.

3. In the paper, we acknowledge that the distribution of the economic burden from privacy regulation is unclear. If websites are forced to reduce prices to reflect the drop in effectiveness and to prevent advertisers from switching to other advertising markets, then advertising-supported internet sites will bear the burden of regulation. On the other hand, if advertisers are unwilling to switch, they will simply have to pay more to achieve the same level of effectiveness as before. This illustrates that the economic burden of regulation will depend heavily on the extent to which advertisers view online and offline advertising as substitutes. In other research, (Goldfarb and Tucker, 2011a,d), we have documented in two different industries that there does appear to be a general pattern of substitution between online and offline media. If this holds, it does suggest the primary burden will be felt by websites rather than by advertisers.

#### 2 Choice in tracking

We also want to emphasize that we believe the precise form that the new regulation takes will matter. Extensive efforts should be made to collect data that illuminate the burden the regulation may impose. In particular, we want to emphasize the attractiveness of testing components of a 'do not track technology' that encourages consumer choice regarding their privacy. This is because our own research indicates that some level of consumer choice regarding privacy can actually enhance the performance of advertising while preserving consumer control over data usage.

Tucker (2010) presents evidence that after Facebook introduced its new privacy settings allowing more control over personally identifiable information and addressed many of its critics' concerns, click-through rates for personalized advertising increased. Similarly, Goldfarb and Tucker (2011b) documents that users, particularly privacy-seeking consumers, respond negatively to advertising that attempts to be both visually intrusive in terms of how distracting its ad design is and behaviorally intrusive by being targeted towards the type of content that the consumer is seeking online.

These two papers suggest that when consumers choose to control what aspects their data

is used for targeting, rather than simply whether or not their data is used for targeting, advertising performance may not suffer at all. It may even rise.

#### 3 Market Structure

We also want to note the potential consequences of privacy regulation for market structure in internet-related industries. In a setting where first-party marketing is allowable but third-party marketing is not, substantial advantages may be created for large incumbent firms. For example, if a large website or online service were able to use its data to market and target advertising, it will be able to continue to improve and hone its advertising, while new entrants will find it difficult to challenge the incumbent's predominance by compiling other data or collecting their own data. This idea is related to a new theory-focused working paper of ours (Campbell, Goldfarb, and Tucker, 2011) that shows how privacy regulation can help incumbent firms maintain dominance by making it more difficult for potential entrants to gain substantial value from customers. In the paper, we show that even with regulations enforcing consent-based first-party marketing, large established firms maintain a substantial advantage, largely because they are more likely to be given consent.

We hope that these comments are useful. Please contact us if you have any questions.

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